

Application No.: 09/745,925

REMARKS

Claims 1-2 are pending in this application. Claim 1 has been amended. New Claims 3 and 4 have been added.

Claim 1 was rejected under 35 USC 102(b) as being anticipated by Campbell et al. (U.S. Patent No. 5,611,024). Applicants respectfully disagree.

Claim 1 as amended is directed to a method of shifting the image prior to printing, comprising: forming the image data into a plurality of independent strips, each of which is a full page in length in the fast scan direction and a number of scan lines in the slow scan direction; compressing each of the plurality of independent strips, the plurality of compressed independent strips forming a compressed image; determining an amount to shift the image and a location to shift the image on the page; shifting the compressed image by either adding or deleting a compressed blank strip corresponding to the amount to shift the image before or after the compressed image in the slow scan direction at the determined location, the compressed image and the compressed blank strip forming a shifted compressed image; decompressing the shifted compressed image into scanlines of pixels, and printing the page.

In independent Claim 1, page image data is formed into a plurality of independent strips and then each of the independent strips is compressed. Then an amount and location of image shift for the entire page image is determined. This image shift is accomplished by shifting the compressed image by either adding or deleting a compressed blank strip corresponding to the amount to shift the image before or after the compressed image in the slow scan direction at the determined location. The compressed blank strip is added to the plurality of compressed independent strips to form a shifted compressed image, which is then decompressed.

New Claim 3 is directed to method of progressive image shifting for use in printing a multi-page document, comprising: for each document page: forming page image data into a plurality of independent strips, each of which is a full page in length in a fast scan direction and a number of scan lines in a slow scan direction; compressing each of the plurality of independent strips, the plurality of compressed independent strips forming a compressed page image; determining an amount and a location to shift the page image on the page; shifting the compressed page image by inserting a compressed blank strip corresponding to the amount to

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shift the page image at the determined location on the page; adjusting locations of the plurality of compressed independent strips according to the location of the compressed blank strip, the compressed page image and the compressed blank strip forming a shifted compressed page image; decompressing the shifted compressed page image, and printing the document.

In independent Claim 3, page image data into a plurality of independent strips and then each of the independent strips is compressed. Then an amount and location of image shift for the entire page image is determined. This image shift is accomplished by inserting a compressed blank strip corresponding to the amount to shift the page image at the determined location on the page. The compressed blank strip is added to the plurality of compressed independent strips to form a shifted compressed page image, which is then decompressed.

Nothing in Campbell et al. teaches or suggests Applicants' method as claimed. Campbell et al. is concerned with the problem of limited printer memory and discloses techniques for storing compressed versions of the images to be printed. However, Campbell et al. discloses at col. 4, lines 17-21: "If the printer's rasterizer/interpreter needs to modify a particular band, it decompresses that band into a working memory, manipulates the data as it needs, and then recompresses that band and stores it in the printer memory." Campbell et al. requires decompression before any modifications can be made. See also col. 6, lines 23-25: "The interpreter/rasterizer 100 may need to modify a stored bit image, and to do so needs to decompose that stored bit image." In Applicants' method, the image is shifted without having to decompress the image.

Claim 2 was rejected under 35 USC 103(a) as being unpatentable over Campbell et al. in view of Collard et al. (U.S. Patent No. 6,681,085). Collard et al. describes a method of copying a bound booklet which permits removing the binding and feeding the pages through the scanner. Nothing in Collard et al. overcomes the lack of teachings of Campbell et al.

Independent Claims 1 and 3 are believed to be allowable. Since Claim 2 depends from Claim 1 and Claim 4 depends from Claim 3, they are also believed to be allowable. Claims 1-4 are believed to be in condition for allowance.

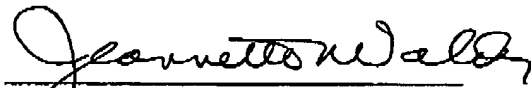
No additional fee is believed to be required for this amendment; however, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees.

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other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025.

Reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is requested to call the undersigned Attorney for Applicants, Jeannette Walder.

Respectfully submitted,



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Xerox Corporation
El Segundo, California
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